

Department of Natural Resources and Parks Solid Waste Division King Street Center, Suite 701 201 South Jackson Street Seattle, Washington 98104-3855 www.metrokc.gov/dnrp/swd

Mitigated Determination of Non-Significance (MDNS)

Name of Proposal: Bio Energy (Washington), LLC - Landfill Gas to Energy Project (Project # AO7P0324) Cedar Hills Gas Processing Plant

Description of Proposal: Bio Energy (Washington), LLC proposes to build a facility at the Cedar Hills Regional Landfill site designed to convert landfill gas generated by the Landfill into pipeline quality methane gas. The facility is planned to process up to 11,000 cubic feet per minute (cfm) of landfill gas containing about 46% methane (CH₄) by volume. Currently, all the landfill gas produced at the site is treated by combustion using five (5) existing landfill gas flares.

The gas processing Plant ("facility") is designed to pass the collected landfill gas through several stages of compression to separate out methane gas and to remove other constituents like carbon dioxide, moisture, sulfur compounds, nitrogen, oxygen, non-methane organic compounds (NMOC), and other trace gases. The design basis for the facility is to produce about 4,000 cfm of gas for pipeline distribution containing about 97% methane and 3% nitrogen. The process will produce a side stream of gases composed of about 39% methane, 55% nitrogen and 6% carbon dioxide that will be used for producing electric power for providing supplementary power supply to the facility. Another stream of gas composed of volatile organic compounds, trace gases, carbon-dioxide, and low concentration of methane (<10%) will be burned using a thermal oxidizer and a secondary open flare. The secondary flare unit also handles gas streams during start up, shut down, and for emergency situations. During longer periods of shut down of the facility, generated landfill gas will be diverted to the Cedar Hills Regional Landfill's flare station for treatment by combustion.

Location of Proposal: The project is located at the Cedar Hills Regional Landfill Facility at 16645 228th Avenue SE, Maple Valley, Washington 98038 (at the intersection of 228th Avenue SE and Cedar Grove Road). The proposed facility will be located within the Cedar Hills Regional Landfill site occupying about 2.0 acres of land near the front end of the Landfill site. The Landfill site lies to the North ½ of the Section 28, Township 23, Range 6 and Section 21, Township 23, Range 6, except the Northeast ¼ thereof. There is a 1000-foot buffer strip along the adjoining property.

Proponent and Lead Agency: Solid Waste Division, Department of Natural Resources and Parks, King County

The Lead Agency for this proposal has determined that it does have a probable minor to moderate adverse impact on the environment if no mitigation measures are taken. The Lead Agency has determined that if the listed mitigation measures are taken, there will be no probable significant adverse impacts on the environment. The recommended mitigation measures are described in Table 1. The Lead Agency also determined that an environmental impact statement (EIS) is not required under RCW 43.21C.030 (2) (c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

Table 1: Mitigation Measures Required and Procedure for Mitigations Enforcement

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This MDNS is issued under WAC 197-11-350 Sections (1) and (7); the lead agency will not act on this proposal for fourteen (14) days from the date below.

Responsible Official:

Kevin E. Kiernan, P.E.

Position/Title:

Division Director of the Solid Waste Division of the King County Department of Natural Resources and

Parks

Address:

201 South Jackson Street, Suite 701

Seattle, WA 98104-3855

DATE: 03-24-04

SIGNATURE:

Contact Person:

Mizanur Rahman, Engineer III

Tel: 206-296-8444; TTY Relay: 711

Email: mizanur.rahman@kingcounty.gov

This material is available in alternate formats upon request to Mizanur Rahman.